Title (en)

POSITION DETECTING SYSTEM AND POSITION DETECTING METHOD

Title (de)

POSITIONSERKENNUNGSSYSTEM UND POSITIONSERKENNUNGSVERFAHREN

Title (fr)

SYSTÈME DE DÉTECTION DE POSITION ET PROCÉDÉ DE DÉTECTION DE POSITION

Publication

EP 2537451 A4 20150916 (EN)

Application

EP 11744452 A 20110113

Priority

- JP 2010033664 A 20100218
- JP 2011050402 W 20110113

Abstract (en)

[origin: US2012098523A1] A system includes an object in a space to generate an induced field; coils that generate a driving field; a detecting coil that detects a synthetic field of the driving field and the induced field; a unit that detects a driving current through the coil in synchronization with field detection by the detecting coil; a calculating unit that calculates a position and a direction of the object based on a detection value of the synthetic field and a detection value of the driving current; and a unit that calculates a phase of a driving field component which corresponds to the driving field at the detection value of the synthetic field, based on the detection value. The calculating unit obtains a component having a phase difference approximately orthogonal to the phase of the driving field component and calculates the position and direction of the object based on the obtained component.

IPC 8 full level

A61B 1/00 (2006.01); **A61B 1/04** (2006.01); **A61B 5/06** (2006.01)

CPC (source: EP US)

A61B 1/00158 (2013.01 - EP US); **A61B 1/041** (2013.01 - EP US); **A61B 5/062** (2013.01 - EP US)

Citation (search report)

- [A] EP 2105085 A1 20090930 - OLYMPUS MEDICAL SYSTEMS CORP [JP]
- [A] EP 2016897 A1 20090121 - OLYMPUS MEDICAL SYSTEMS CORP [JP]
- [A] WO 2009019916 A1 20090212 - OLYMPUS MEDICAL SYSTEMS CORP [JP], et al & EP 2177148 A1 20100421 - OLYMPUS MEDICAL SYSTEMS CORP [JP], et al
- [A] EP 1932463 A1 20080618 - OLYMPUS CORP [JP]
- See references of WO 2011102161A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2012098523 A1 20120426; **US 8421445 B2 20130416**; CN 102802496 A 20121128; CN 102802496 B 20150401; EP 2537451 A1 20121226; EP 2537451 A4 20150916; JP 4961510 B2 20120627; JP WO2011102161 A1 20130617; WO 2011102161 A1 20110825

DOCDB simple family (application)

US 201113209720 A 20110815; CN 201180014617 A 20110113; EP 11744452 A 20110113; JP 2011050402 W 20110113; JP 2011534441 A 20110113